



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

27194 7590 07/10/2009

HOWREY LLP-CA
C/O IP DOCKETING DEPARTMENT
2941 FAIRVIEW PARK DRIVE, SUITE 200
FALLS CHURCH, VA 22042-2924

EXAMINER

WONG, XAVIER S

ART UNIT

PAPER NUMBER

2416

DATE MAILED: 07/10/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/814,729

03/30/2004

Kha H. Nguyen

02453.0029.NPUS00

8796

TITLE OF INVENTION: SYSTEM AND METHOD FOR EGRESS PACKET MARKING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	10/13/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

27194 7590 07/10/2009

HOWREY LLP-CA
C/O IP DOCKETING DEPARTMENT
2941 FAIRVIEW PARK DRIVE, SUITE 200
FALLS CHURCH, VA 22042-2924

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,729	03/30/2004	Kha H. Nguyen	02453.0029.NPUS00	8796

TITLE OF INVENTION: SYSTEM AND METHOD FOR EGRESS PACKET MARKING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	10/13/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
WONG, XAVIER S	2416	370-230000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/814,729

03/30/2004

Kha H. Nguyen

02453.0029.NPUS00

8796

27194

7590

07/10/2009

EXAMINER

WONG, XAVIER S

ART UNIT

PAPER NUMBER

2416

DATE MAILED: 07/10/2009

HOWREY LLP-CA
C/O IP DOCKETING DEPARTMENT
2941 FAIRVIEW PARK DRIVE, SUITE 200
FALLS CHURCH, VA 22042-2924

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1153 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1153 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability	Application No.	Applicant(s)	
	10/814,729	NGUYEN ET AL.	
	Examiner	Art Unit	
	Xavier Szewai Wong	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 16th April 2009.
2. ☒ The allowed claim(s) is/are 60-80 renumbered as 1-21.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other ____. |
|---|--|

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Laurenson on 29th June 2009.

60. (Currently Amended). In a packet modification system for receiving packets, previously classified by a packet classification system, from one or more switch-side devices, modifying the packets to facilitate egress thereof from the packet modification system, and transmitting the modified packets to one or more network-side devices, a packet marker for selectively updating one or more quality of service (QoS) fields in such a modified packet, prior to egress thereof from the packet modification system, comprising:

one or more memories for holding (1) a table associating possible values of for the one or more QoS fields of the packet with an index, (2) values of the one or more QoS fields taken from the packet prior to modification thereof by the packet modification system, ~~(3) possible values of the one or more of the QoS fields independent of the table~~, and ~~([4])~~ (3) one or more egress mark commands; and a packet marker processor for utilizing a link associated with the packet by the packet classification system to access the one or more egress mark commands stored in the one or more memories, and executing such commands to selectively update the one or more QoS fields of the modified packet;

wherein the packet maker processor, upon executing these commands, individually selects, for each of the one or more QoS fields, the process used for updating the field from amongst at least the following processes:

updating the field using the value of the field taken from the packet prior to modification thereof by the packet modification system as stored in the one or more memories;

updating the field using a value obtained by performing a table lookup operation on the table stored in the one or more memories, using as an index in said operation a value obtained or derived from information associated with the packet by the packet classification system; and

updating the field ~~with one of the values stored in the one or more memories independent of the table~~ using a value derived from at least one of the one or more egress mark commands;

Art Unit: 2416

wherein at least one of the one or more QoS fields of the packet are selected from the group comprising a Virtual Local Area Network Priority (VLAN VPRI) field, a Multilabel Protocol Label Switching Exponent (MPLS EXP) field, and an Internet Protocol version 4 Type of Service/version 6 Traffic Class (IPv4ToS/IPv6TC) field.

62. (Currently Amended) The packet marker of claim 61 where the plurality of QoS fields comprises a ~~Virtual Local Area Network (VLAN)~~ VLAN Priority (VLAN VPRI) field, a ~~Multilabel Protocol Label Switching (MPLS)~~ Exponent (MPLS EXP) field, and an ~~Internet Protocol version 4/version 6 (IPv4ToS/IPv6TC)~~ Terms of Service (ToS) field.

68. (Currently Amended) In a packet modification system for receiving packets, previously classified by a packet classification system, from one or more switch-side devices, modifying the packets to facilitate egress thereof from the packet modification system, and transmitting the modified packets to one or more network-side devices, a packet marker for selectively updating any one or more of Virtual Local Area Network ~~(VLAN)~~ VLAN Priority (VLAN VPRI), Multilabel Protocol Label Switching ~~(MPLS)~~ Exponent (MPLS EXP), and Internet Protocol version 4 Type of Service/version 6 Traffic Class (IPv4ToS/IPv6TC) ~~Terms of Service (ToS)~~ quality of service (QoS) fields in such a modified packet, prior to egress thereof from the packet modification system, comprising:

one or more memories for holding (1) a table associating ~~possible values of~~ for one or more of the VLAN VPRI, MPLS EXP, and IPv4ToS/IPv6TC ~~ToS~~ QoS fields with an index, (2) values of one or more of the VLAN VPRI, MPLS EXP, and IPv4ToS/IPv6TC ~~ToS~~ QoS fields taken from the packet prior to modification thereof by the packet modification system, ~~(3) possible values of one or more of the VLAN VPRI, MPLS EXP and IPv4/IPv6 ToS fields independent of the table,~~ and ~~([4])~~ (3) one or more egress mark commands; and

a packet marker processor for utilizing a link associated with the packet by the packet classification system to access the one or more egress mark commands stored in the one or more memories, and executing such commands to selectively update any one or more of the VLAN VPRI, MPLS EXP, and IPv4ToS/IPv6TC ~~ToS~~ QoS fields in the packet;

wherein the packet marker processor, upon executing these commands, individually selects, for each of one or more of the VLAN VPRI, MPLS EXP and IPv4ToS/IPv6TC ~~ToS~~ fields, the process used for updating the field from amongst at least the following processes:

updating the field using the value of the field taken from the packet prior to modification thereof by the packet modification system as stored in the one or more memories;

updating the field using a value obtained by performing a table lookup operation on the table stored in the one or more memories, using as an index in said

Art Unit: 2416

operation a value obtained or derived from egress mark control information associated with the packet by the packet classification system; and updating the field ~~with one of the values stored in the one or more memories independent of the table~~ using a value derived from at least one of the one or more egress mark commands.

72. (Currently Amended) The packet marker of claim 68 where the packet marker processing also selects from the following process when individually selecting the process used for updating each of the VLAN VPRI, MPLS EXP, and IPv4ToS/IPv6TC ToS QoS fields of the packet:

updating the field using a value obtained by performing a table lookup operation on the table stored in the one or more memories, using as an index in said operation a value obtained or derived from a queue number associated with the packet by the packet classification system.

73. (Currently Amended) In a packet modification system for receiving packets, previously classified by a packet classification system, from one or more switch-side devices, modifying the packets to facilitate egress thereof from the packet modification system, and transmitting the modified packets to one or more network-side devices, a method of selectively updating one or more quality of service (QoS) fields in such a modified packet, prior to egress thereof from the packet modification system, comprising:

holding in one or more memories (1) a table associating ~~possible values of~~ for the one or more QoS fields of the packet with an index, (2) values of the one or more QoS fields of the packet prior to modification thereof by the packet modification system, ~~(3) possible values of the one or more QoS fields independent of the table,~~ and ~~([4])~~ (3) one or more egress mark commands; and selectively updating the one or more QoS fields of the packet, comprising individually selecting, for each such field, the process used for updating the field from amongst at least the following processes:

updating the field using the value of the field taken from the packet prior to modification thereof by the packet modification system as stored in the one or more memories;

updating the field using a value obtained by performing a table lookup operation on the table stored in the one or more memories, using as an index in said operation a value obtained or derived from information associated with the packet by the packet classification system; and

updating the field ~~with one of the values stored in the one or more memories independent of the table~~ using a value derived from at least one of the one or more egress mark commands;

wherein at least one of the one or more QoS fields of the packet are selected from the group comprising a Virtual Local Area Network Priority (VLAN VPRI) field, a

Art Unit: 2416

Multilabel Protocol Label Switching Exponent (MPLS EXP) field, and an Internet Protocol version 4 Type of Service/version 6 Traffic Class (IPv4ToS/IPv6TC) field.

75. (Currently Amended) The method of claim 74 where the plurality of QoS fields comprises a ~~Virtual Local Area Network (VLAN) VLAN Priority (VLAN VPRI) field, a Multilabel Protocol Label Switching (MPLS) Exponent (MPLS EXP) field, and an Internet Protocol version 4/version 6 (IPv4ToS/IPv6TC) Terms of Service (ToS) field.~~

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Mohaban et al, US 2007/0204036 A1: creating policies for policy-based management of quality of service treatments of network data traffic flows
2. Deerman et al, US 7002974 B1: QoS processor also includes a packet modification engine, which is operable to modify, add, or delete bits in any of the fields of a data packet; and allows QoS processor to change DiffServ bits, or to place the appropriate MPLS shims on the data packets for the required treatment
3. Hussain et al, US 2003/0223361 A1: QoS translator may take the updated LQ header PRI and RM fields and may reverse translate these back to the packet's TOS/EXP field; if the QoS pointer is NULL, then the translation may be skipped
4. Jin et al, US 2005/0111360 A1: certain bits of a packet, such as bits in the IP header of an IP packet, are used to designate the type of service or Quality of Service (QoS) level to be afforded to the packet as it passes through a data communications network A user entitled to a certain QoS level logs into a service selection gateway SSG
5. Solomon et al, US 2003/0214905 A1: a quality of service coordinator for initializing a change indicator at the start of operation; memory for storing the change indicator during a monitoring period; the quality of service coordinator operable during the monitoring period and further comprising: a frame processor for monitor the received change indicator for changes in the quality of service requirements; a comparator for comparing the received change indicator to the most recently stored updating the change indicator in response to the monitoring step; an updatator operable, in response to detecting a change in the change indicator, to update the stored quality of service parameters, and to store the new change indicator

Art Unit: 2416

6. Lee, US 2003/0126286 A1: converting a data packet from a first quality of service (QoS) structure to a second QoS structure to determine a priority level of the data packet received at a system configured to receive data packets of the second QoS structure, comprising: receiving a data packet having a first quality of service (QoS) structure at a system configured for a second QoS structure; analyzing prescribed header information of the received data packet to determine a priority level of the data packet; transforming the priority level information from the header of the received data packet into a corresponding priority level of the second QoS structure using a transformation table; and modifying the header information of the received data packet to include the transformed priority level corresponding to the second QoS structure

7. Scott, US 2006/0209796 A1: transmission control module defines the format for each data packet, and updates and synchronizes header information in the data packets

8. Kloth et al, US 6798746 B1: IP packet modifier (1) assigning the packet an initial class of service value based upon a class of service value encoded in a received IP packet if such class of service value is encoded in the packet and the port is a trunk port; (2) assigning the packet an initial class of service value configured for the port if (a) no class of service value encoded in the received IP packet and if the port is a trunk port, or (b) the port is an access port; (3) reassigning the packet a class of service value configured for the packet's MAC destination address if such value is configured; and (4) comparing said flow information from the packet with configured Access Control Entries (ACEs) and if the packet's flow matches a configured ACE reassigning the packet a class of service value corresponding to the class of service value configured for the matched ACE; an active flow table storing active flows and corresponding quality of service parameters specifying at least an output queue for each active flow; a codepoint generator responsive to said flow information extractor and said quality of service parameters

9. Sheth et al, US 2002/0103925 A1: using a dynamically modifiable combination of fields of an IPv4 packet header to classify the packet

10. Parker et al, US 7463628 B2: command instruction set for a packet data modification processor has a format in which a packet address, if present, specifies an encapsulated layer within the packet and a location within this encapsulated layer; wherein the at least one command within the command instruction set specifies deriving at least a portion of a first packet from data taken from a second packet or the command

11. Parker et al, US 7292591 B2: packet parser functions are distributed throughout a packet processing system comprising a packet classification system and a packet modification system

Art Unit: 2416

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xavier Wong whose telephone number is 571.270.1780. The examiner can normally be reached on Monday through Friday 8:30 am - 6:00 pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571.272.3174. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800.786.9199 (IN USA OR CANADA) or 571.272.1000.

/Xavier Szewai Wong/
x.s.w
29th June 2009

/Seema S. Rao/
Supervisory Patent Examiner, Art
Unit 2416